STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

4900 Brittany Drive, #1811, St. Petersburg, FL 33715

MO-0115746

John Feldwisch

Permit No.

Owner:

Address:

Continuing Authority: Address:	Same as above Same as above					
Facility Name: Facility Address:	Century Business Park Century Commerce Loop, Washington, MO 63090					
Legal Description: UTM Coordinates:	NW ¹ / ₄ , SE ¹ / ₄ , SW ¹ / ₄ , Sec. 33, T44N, R1E, Franklin County X=681577, Y=4265010					
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.:	Wet Weather Tributary to Browns Branch (U) Browns Branch (C) (01689) (10300200-130001)					
is authorized to discharge from the facility of as set forth herein:	described herein, in accordance with the effluent limitations and monitoring requirements					
FACILITY DESCRIPTION Outfall #001 - SIC # 7380, Office Park Septic tank/recirculating sand filter/sludge of Design population equivalent is 30. Design flow is 2000 gallons per day. Design sludge production is 0.21 dry tons/y						
	charges under the Missouri Clean Water Law and the National Pollutant Discharge her regulated areas. This permit may be appealed in accordance with Section 644.051.6 of					
June 25, 2010 Effective Date	Mark N. Templeton, Director, Department of Natural Resources					
June 24, 2015 Expiration Date	Mike Struckhoff, Director, St. Louis Regional Office					

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 3

PERMIT NUMBER MO-0115746

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND	UNITS	UNITS FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
EFFLUENT PARAMETER(S)	CIVIIS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	once/month	grab
Total Suspended Solids	mg/L		45	30	once/month	grab
pH – Units	SU	**		**	once/month	grab
Ammonia as N	mg/L	*		*	once/month	grab
Temperature	°C	*		*	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE October 28, 2010. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

C. SPECIAL CONDITIONS (continued)

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 μg/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.
- 6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. The permittee shall comply with any applicable requirements listed in 10 CSR 20-8 and 10 CSR 20-9, unless the facility has received written notification that the Department has approved a modification to the requirements. The monitoring frequencies contained in this permit shall not be construed by the permittee as a modification of the monitoring frequencies listed in 10 CSR 20-9. If a modification of the monitoring frequencies listed in 10 CSR 20-9 is needed, the permittee shall submit a written request to the department for review and, if deemed necessary, approval.

Missouri Department of Natural Resources Statement of Basis Century Business Park NPDES #: MO-0115746

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rational for the development of the NPDES Missouri State Operating Permit (operating permit). Statement of Basis are required for all operating permits for which a Fact Sheet is not required. Statement of Basis briefly describes, among other items, the derivation of the effluent limitation and the reasons for operating permit's Special Conditions. Fact Sheets should be developed for any permit that requires complex calculations or special conditions; and this is particularly true for permit conditions based on Best Professional Judgment (BPJ).

A Statement is not an enforceable part of an operating permit.

Part I - Facility Information

Facility Type: Sewage treatment plant serves a small office park and receives only domestic sewage.

Facility SIC #: 7380

Owner: John Feldwisch

Address: 4900 Brittany Drive, #1811, St. Petersburg, FL 33715

Continuing Authority: Same as above Address: Same as above

Facility Name: Century Business Park (4130 Old Highway 100)
Facility Address: Century Commerce Loop, Washington, MO 63090
Legal Description: NW¹/₄, SE¹/₄, SW¹/₄, Sec. 33, T44N, R1E, Franklin County

Latitude/Longitude: +3830539/-09055023 (GPS reading)

UTM Coordinates: X=681577, Y=4265010

Receiving Stream: Wet Weather Tributary to Browns Branch (U)

First Classified Stream and ID: Browns Branch (C) (01689)

USGS Basin & Sub-watershed No.: (10300200-130001)

Facility Description:

Septic tank/recirculating sand filter/sludge disposal by contract hauler

Design population equivalent is 30. Design flow is 2000 gallons per day.

Design sludge production is 0.21 dry tons/year.

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	2000 GPD	Secondary	Domestic	2.1 miles

Receiving Water Body's Water Quality & Facility Performance History:

There is no operating history available. Receiving stream is a wet weather tributary, no information was found. A 22,200 GPD permitted treatment facility for El Vallejo Subdivision, MO-0057916, exists approximately 0.6 miles downstream from this discharge.

Comments:

This facility was issued construction permit #22-4638 on 12-4-1994. On 11-27-1995 the permit was extended for one year to expire 12-1-1996. The facility was constructed at some point after 1995. It was placed in service at some unknown time. The Department was not notified that construction had been done, nor that the plant was put in service. An operating permit was not applied for so the facility has operated without a permit for several years. An inspection by the Department in May 2007 revealed that the plant was in operation and discharging. The owner applied for an Operating Permit in 2007 as directed to do so in the inspection report.

Part II - Operator Certification Requirements

Not Applicable ⊠; This facility is not required to have a certified operator.

Part III - Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

Missouri or Mississippi River [10 CSR 20-7.015(2)]:	
Lake or Reservoir [10 CSR 20-7.015(3)]:	
Losing [10 CSR 20-7.015(4)]:	
Metropolitan No-Discharge [10 CSR 20-7.015(5)]:	
Special Stream [10 CSR 20-7.015(6)]:	
Subsurface Water [10 CSR 20-7.015(7)]:	
All Other Waters [10 CSR 20-7.015(8)]:	\bowtie

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1st classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE:

Waterbody Name	CLASS	WBID	Designated Uses*	8-Digit HUC	EDU**
Wet Weather Tributary to Browns Branch	U		General Criteria	10300200	Ozark/ Moreau/
Browns Branch	C		IRR, LWW, WBC***	10300200	Loutre

^{* -} Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

 \boxtimes - New facility , backsliding does not apply.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ... An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.

COMPLIANCE AND ENFORCEMENT:

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not	Ann	licab	le	\boxtimes	ľ
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The permittee/facility is not currently under Water Protection Program enforcement action.

^{** -} Ecological Drainage Unit

^{*** -} UAA has not been conducted or is incomplete.

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- <u>Flow</u>. In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- <u>Biochemical Oxygen Demand (BOD₅)</u>. 45 mg/L as a Weekly Average and 30 mg/L as a Monthly Average. Please see the APPLICABLE DESIGNATION OF WATERS OF THE STATE sub-section of the <u>Receiving Stream Information</u>.
- <u>Total Suspended Solids (TSS)</u>. 45 mg/L as a Weekly Average and 30 mg/L as a Monthly Average. Please see the APPLICABLE DESIGNATION OF WATERS OF THE STATE sub-section of the **Receiving Stream Information**.
- <u>pH</u>. pH shall remain in the range of six to nine (60 to 9.0) standard units, please see the APPLICABLE DESIGNATION OF WATERS OF THE STATE sub-section of the <u>Receiving Stream Information</u>.
- <u>Temperature.</u> Monitoring requirement due to the toxicity of Ammonia varies by temperature.
- <u>Total Ammonia Nitrogen</u>. Monitoring requirement only. Monitoring for temperature and ammonia are included to determine whether "reasonable potential" to exceed water quality standards exists.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm

Not Applicable \boxtimes ;

This wastewater treatment facility is not a POTW. Influent monitoring is not being required to determine percent removal.

Sanitary Sewer Overflows (SSOs), Bypasses, Inflow & Infiltration (I&I) – Prevention/Reduction:

Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable ⊠;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable \boxtimes ;

This permit does not contain a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities: (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Not Applicable \boxtimes ;

At this time, the permittee is not required to develop and implement a SWPPP.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST:

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Applicable □;
Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri
State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System
(NPDES). WET testing are also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-
6.010(8)(A)7. and the Water Quality Standards 10 CSR 20-7.031(3)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-
6.010(8)(A)4], the department may require other terms and conditions that it deems necessary to assure compliance with the Clean
Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§§644.051.3
requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity a
an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc); and 644.051.5 is th
basic authority to require testing conditions. WET test will be required by <u>all</u> facilities meeting the following criteria:
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Facility is a designated Major.

	Facility is a designated Major.
	Facility continuously or routinely exceeds its design flow.
	Facility (industrial) that alters its production process throughout the year.
	Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
	Facility has Water Quality-based Effluent Limitations for toxic substances (other than NH ₃)
	Facility is a municipality or domestic discharger with a Design Flow ≥ 22,500 gpd.
	Other – please justify.

Not Applicable ⊠;

At this time, the permittee is not required to conduct WET test for this facility.

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Not Applicable ⊠;

This facility does not discharge to a 303(d) listed stream.

Part V – Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

Date of Statement of Basis: March 23, 2010

Public notice held April 23, 2010 to May 23, 2010.

Permit issued June 25, 2010.

Andrew G. Appelbaum, P.E. Environmental Engineer St. Louis Regional Office 7545 S. Lindbergh, Suite 210 St. Louis, MO 63125 (314) 416-2960 andy.appelbaum@dnr.mo.gov